

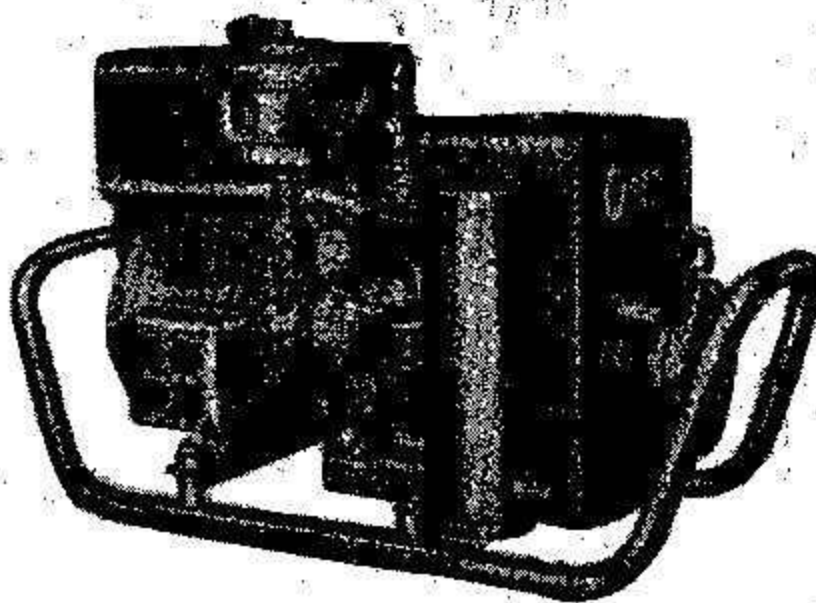
PARTS CATALOG

FOR

ONAN ELECTRIC GENERATING PLANTS

Series

AK



DIVISION OF STUDEBAKER-PACKARD CORPORATION
MINNEAPOLIS 14, MINNESOTA

925-6

Price \$1.00

Printed in U.S.A.

INSTRUCTIONS FOR ORDERING REPAIR PARTS

FOR PARTS OR SERVICE, CONTACT THE DEALER FROM WHOM
YOU PURCHASED THIS EQUIPMENT OR REFER TO YOUR NEAR-
EST AUTHORIZED SERVICE STATION.

TO AVOID ERRORS OR DELAY IN FILLING YOUR PARTS ORDER, PLEASE
FURNISH ALL INFORMATION REQUESTED.

REFER TO THE NAMEPLATE ON YOUR PLANT

1. Always give the MODEL & SPEC. NO. and SERIAL NO.

ELECTRIC ONAN PLANT
MODEL AND SPEC. NO. SERIAL NO.
IMPORTANT -
A.C. VOLTS H.P.A. WATTS
P.F. AMPS CYCLES PHASE
D.C. VOLTS AMPS WATTS
E.P.H. NO. GEN. DATA NO.
S.P.H. USE VOLT BATTERY
ONAN ENGINE WORKS, INC., MILWAUKEE, WISCONSIN, U.S.A.
MINNEAPOLIS, MINNESOTA, U.S.A.

4229

For handy reference, copy YOUR plant
nameplate information in the spaces above.

2. Do not order by reference number or group number, use part number and description.
3. Give the part number, description and quantity needed of each item. If an old part cannot be identified, return the part prepaid to your dealer or nearest AUTHORIZED SERVICE STATION. Print your name and address plainly on the package. Write a letter to the same address stating the reason for returning the part.
4. State definite shipping instructions.

Any claim for loss or damage to your unit in transit should be filed promptly against the transportation company making the delivery. Shipments are complete unless the packing list indicates items are back ordered.

"Prices are purposely omitted from this Parts Catalog due to the confusion resulting from fluctuating costs, import duties, sales taxes, exchange rates, etc.

For Current parts prices, consult your Onan Dealer, Distributor or Parts and Service Center."

"En esta lista de partes los precios se omiten de proposito, ya que bastante confusion resulto de fluctuaciones de los precios, derechos aduanales, impuestos de venta, cambios extranjeros etc.

Consiga los precios vigentes de su distribuidor de productos "ONAN".

PARTS CATALOG

1

This parts catalog applies to the AK series generating plants listed in the Plant Data Table. Parts are arranged in groups of related items. Some groups of optional equipment are included. Each illustrated part is identified by a Reference number corresponding to the same Reference number in the Parts List for the particular group. Parts illustrations represent typical items and do not necessarily portray a particular part number.

Use this parts catalog as a general guide in selecting parts. The manufacturer makes many types of generating plants and industrial engines, with optional features in each basic series. Always give the full MODEL and SPEC. NO. and complete serial number when referring to the plant.

Compare your plant nameplate MODEL and SPEC. NO. with the Plant Data Table. Select the Parts Key No. (1, 2, etc. in the last column) that applies to your plant Model and Spec. No. This Parts Key No. appears in the Description of parts that differ between models. Certain parts Descriptions contain additional descriptive information, such as voltage of the plant. Reference is sometimes made to Spec. A, B, etc. This refers to the LETTER at the end of the plant MODEL and SPEC. NO. This Spec. LETTER advances (A to B, B to C, etc.) with manufacturing changes. Unless otherwise mentioned in the parts Description, parts are interchangeable between various models.

PLANT DATA TABLE

MODEL AND SPEC. NO.	TYPE**	ELECTRICAL DATA				PARTS KEY NO.
		WATTS	VOLTS	CYCLES	RPM	
			†			
05AK-1M/, 05AK-1MV	MANUAL	500	120AC	60	1800	1
05AK-2M/, 05AK-2MV	MANUAL	500	240AC	60	1800	1
05AK-1R/, 05AK-1RV	REMOTE	500	120AC	60	1800	2
05AK-2R/, 05AK-2RV	REMOTE	500	240AC	60	1800	2
07AK-1M/, 07AK-1MV	MANUAL	750	120AC	60	1800	3
07AK-2M/, 07AK-2MV	MANUAL	750	240AC	60	1800	3
07AK-1R/, 07AK-1RV	REMOTE	750	120AC	60	1800	4
07AK-2R/, 07AK-2RV	REMOTE	750	240AC	60	1800	4
05AK-206E/, 05AK-206EV	* BAT. CHG.	500	6	DC	2400	5
05AK-212E/, 05AK-212EV	BAT. CHG.	500	12	DC	2300	6
07AK-232E/, 07AK-232EV	BAT. CHG.	750	32	DC	2200	7
102AK-51M/, 102AK-51MV	MANUAL	1250	120AC	50	3000	8
102AK-52M/, 102AK-52MV	MANUAL	1250	240AC	50	3000	8
102AK-51P/	PORTABLE	1250	120AC	50	3000	9
102AK-52P/	PORTABLE	1250	240AC	50	3000	9
105AK-1M/, 105AK-1MV	MANUAL	1500	120AC	60	3600	6
105AK-2M/, 105AK-2MV	MANUAL	1500	240AC	60	3600	8
105AK-1P/	PORTABLE	1500	120AC	60	3600	9
105AK-2P/	PORTABLE	1500	240AC	60	3600	9
105 AK-115M/	MANUAL	1500	115	DC	2600	10
105AK-1ML/, 105AK-1PL/ with Automatic Idle Control - SEE SPECIAL GROUP						

* This Spec. letter advances with manufacturing changes.

** Manual type plants are suitable for either stationary or portable service. Manual pull rope cranking only.

Remote control type plants are designed primarily for permanent installations. Batteries required for electric starting, at the plant or from a remote control switch.

Battery charging type plants MUST be used only with batteries. The plant is electrically cranked.

Portable plants are designed for ease of portability. Manual pull rope cranking only.

† NOTE: Reference to 120 and 240 volt also applies to 115 and 230 volt.

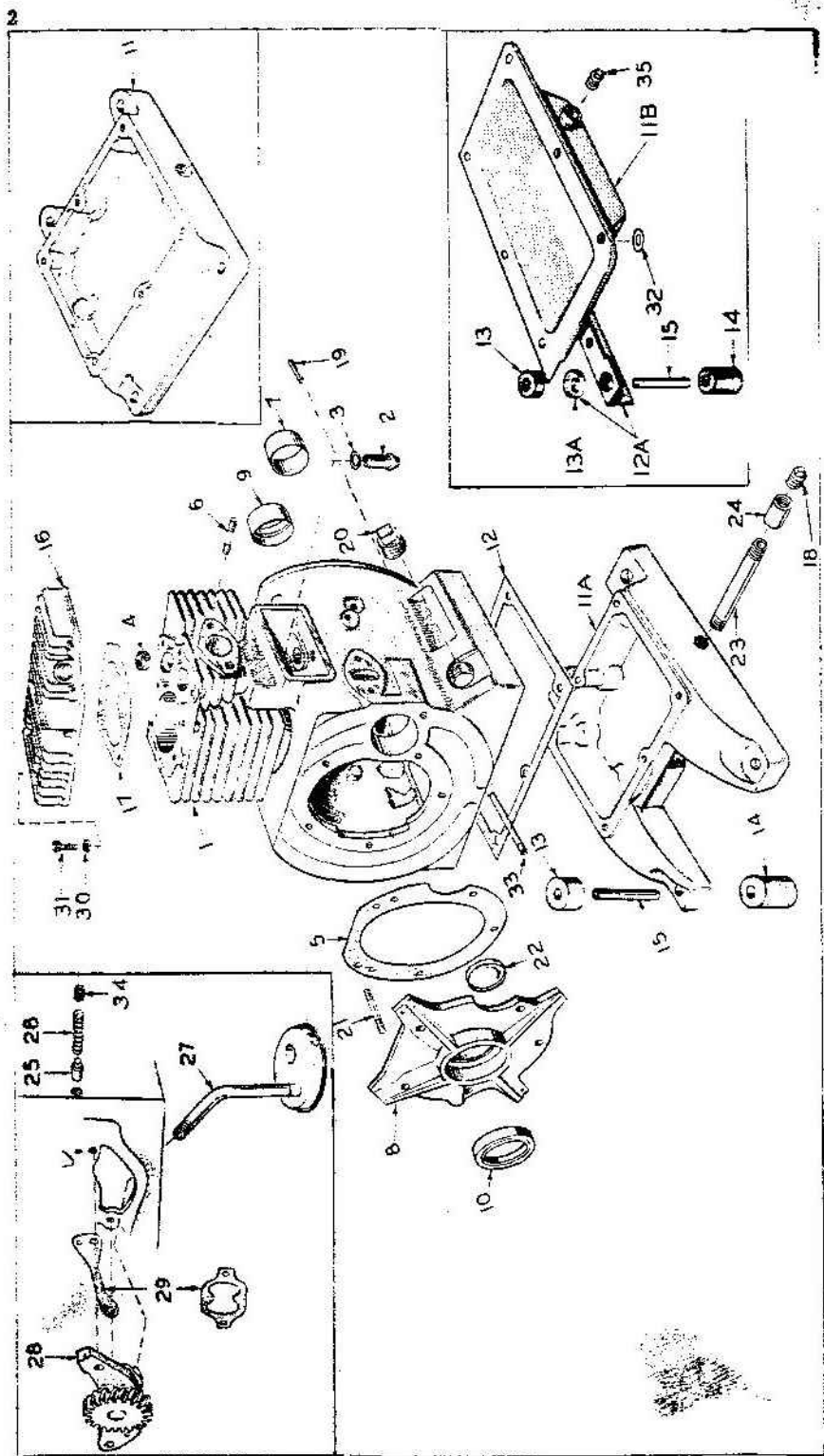
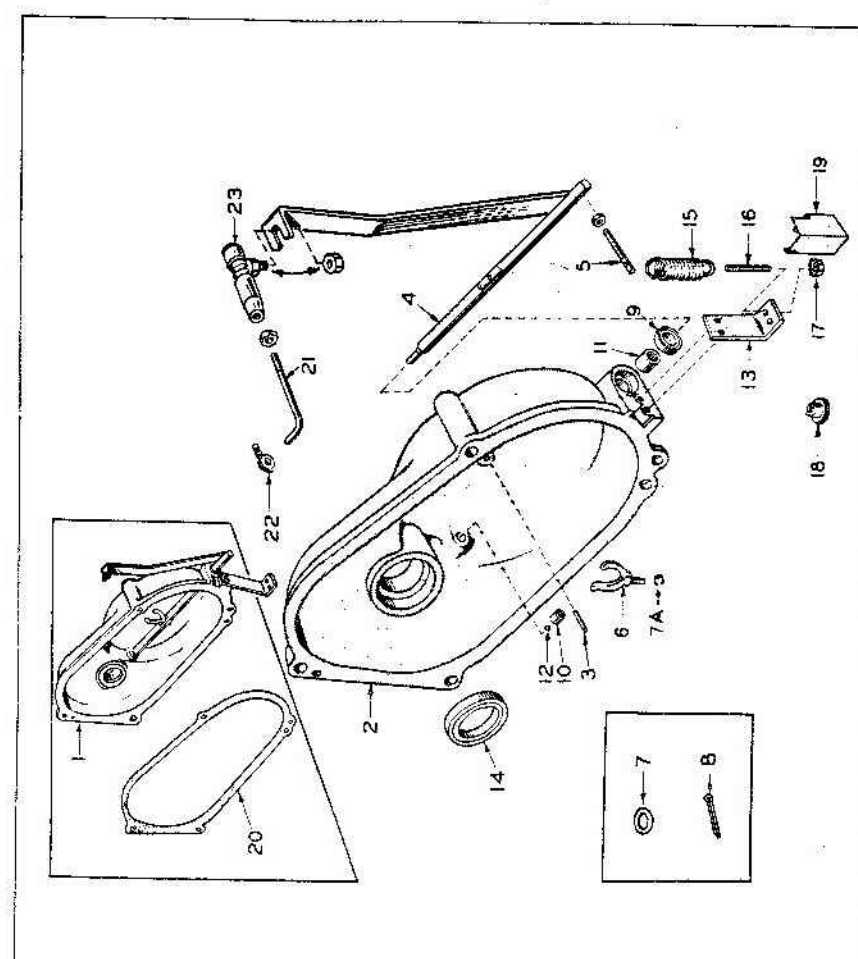
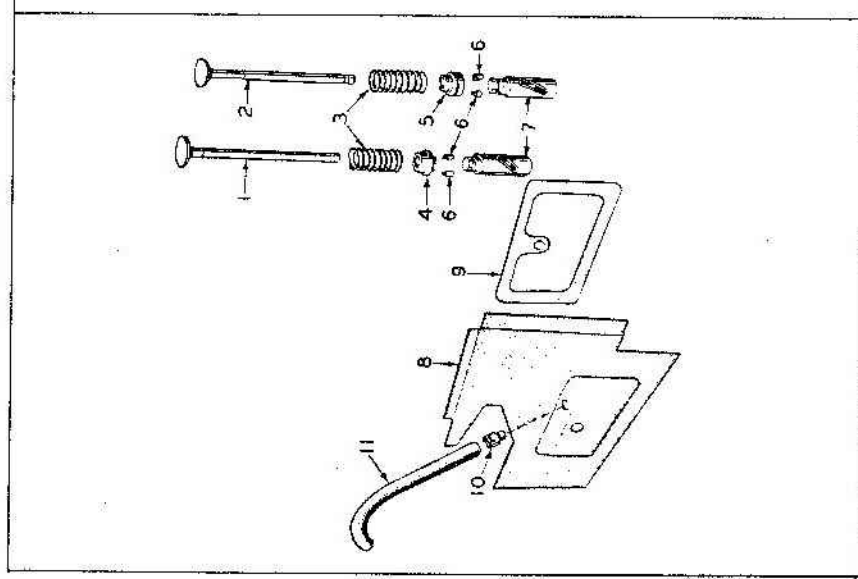


FIG. 1 - CYLINDER BLOCK AND OIL BASE GROUP



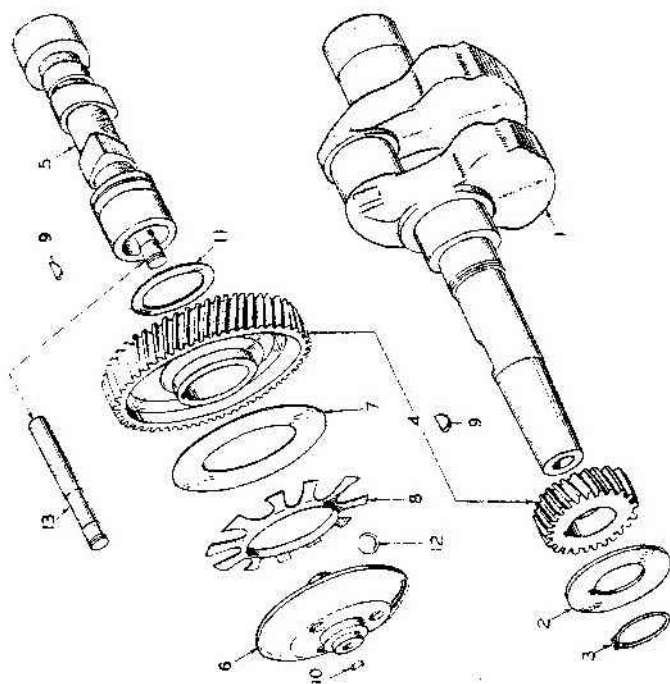


FIG. 4 - CRANKSHAFT, CAMSHAFT AND GOVERNOR CUP GROUP

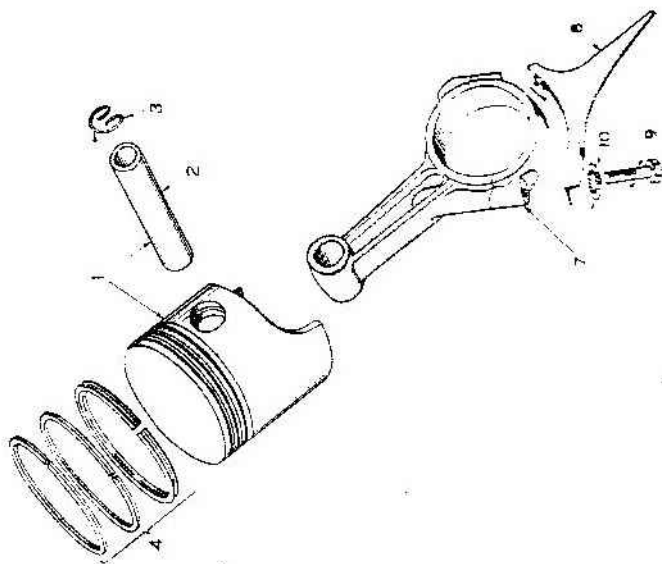


FIG. 5 - PISTON & CONNECTING ROD GROUP

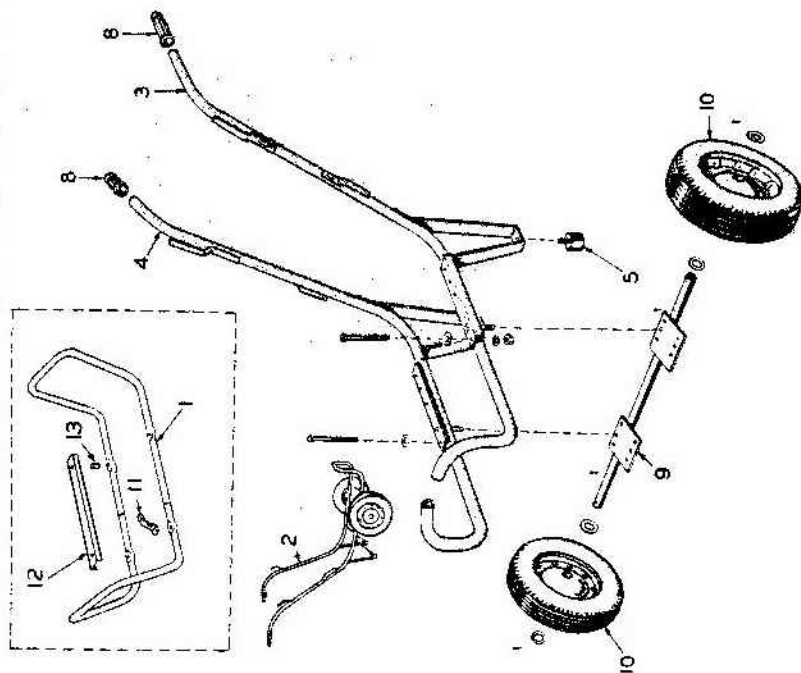


FIG. 7 - CARRYING FRAME & DOLLY GROUP

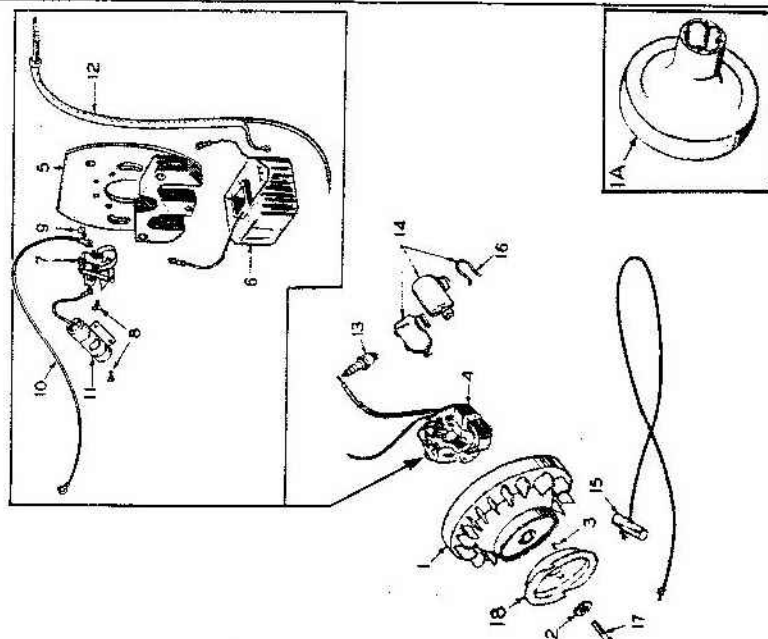


FIG. 6 - MAGNETO IGNITION GROUP

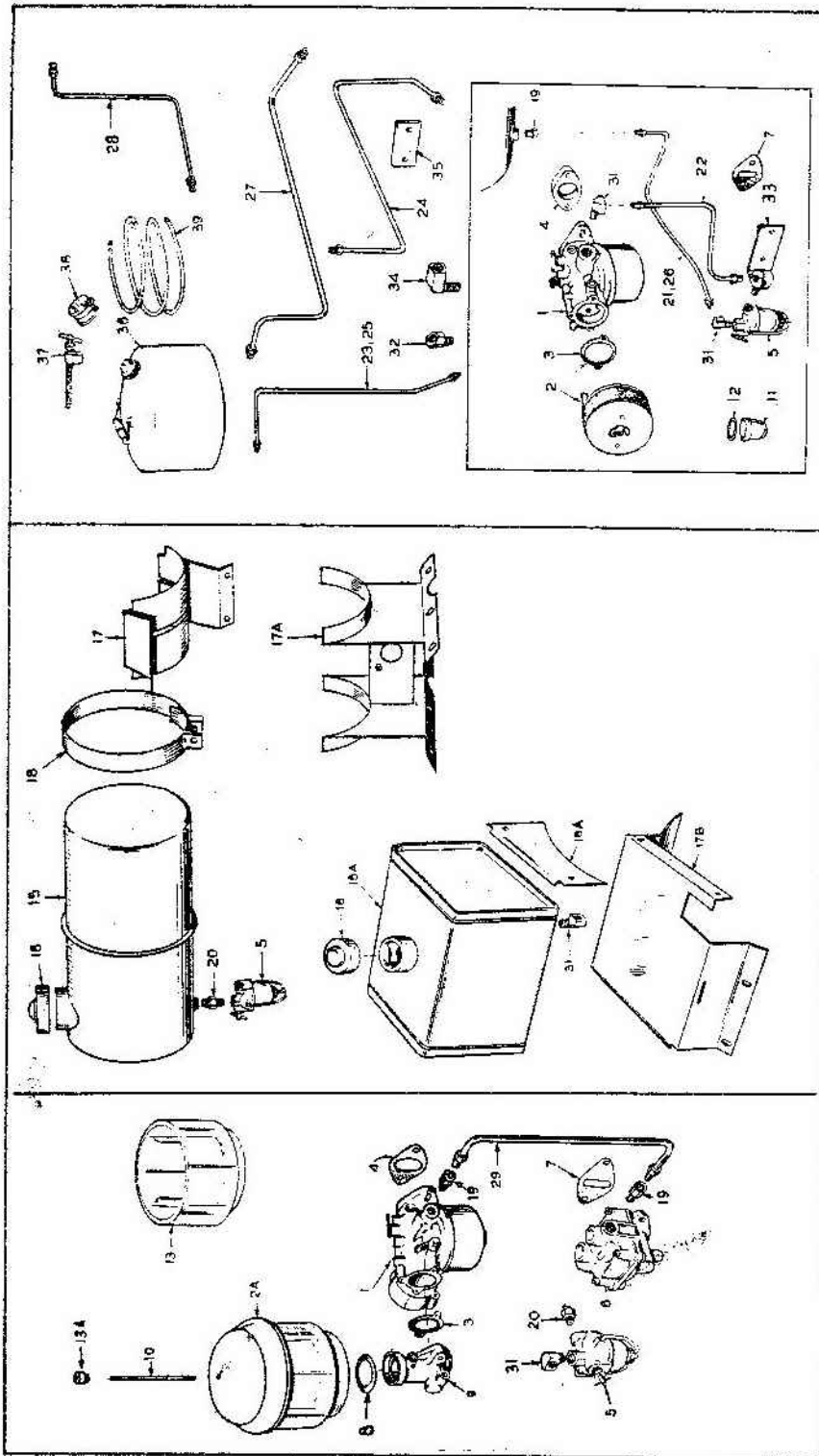


FIG. 8 - FUEL SYSTEM GROUP

FIG. 9 - CARBURETOR PARTS GROUP

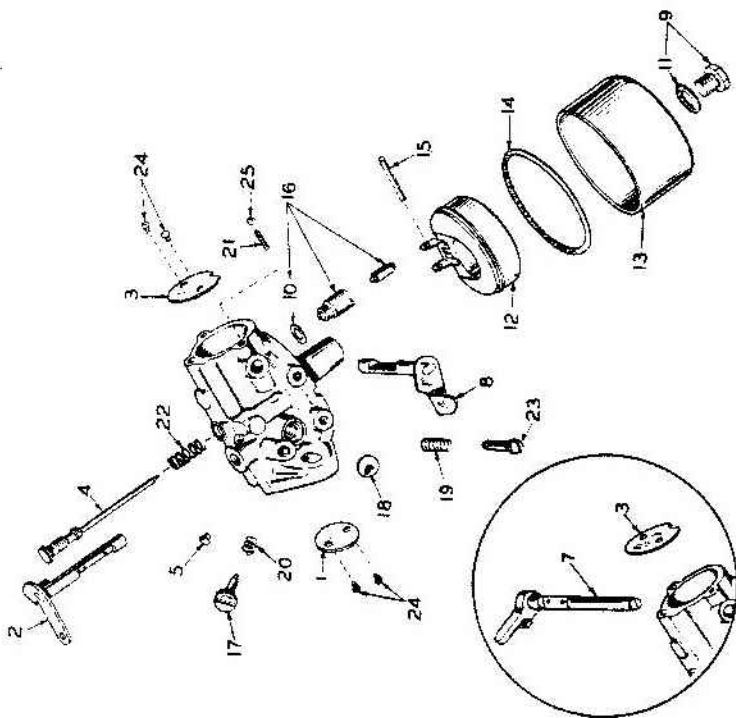
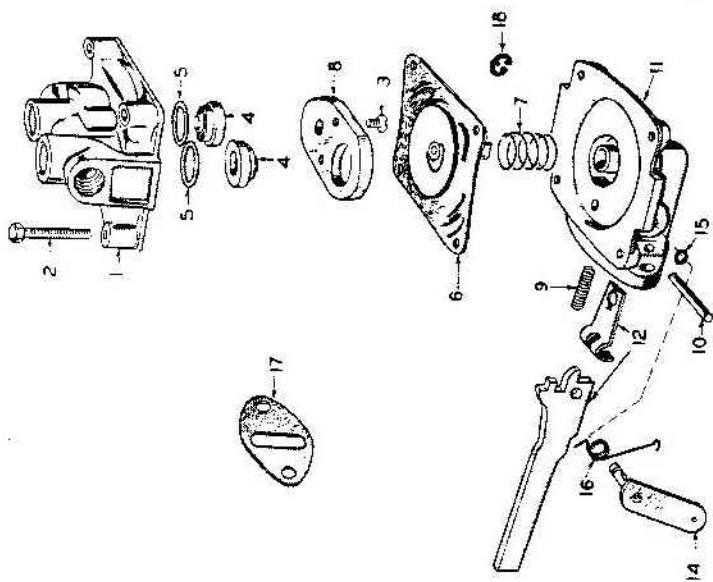


FIG. 10 - FUEL SYSTEM PARTS GROUP



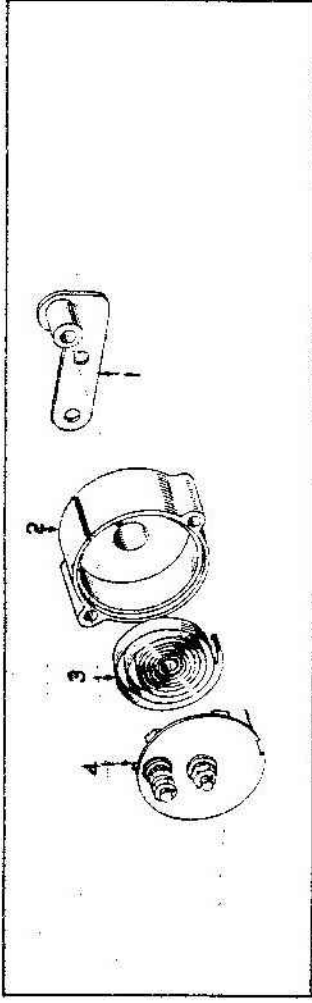


FIG. 11 - ELECTRIC CHOKES GROUP

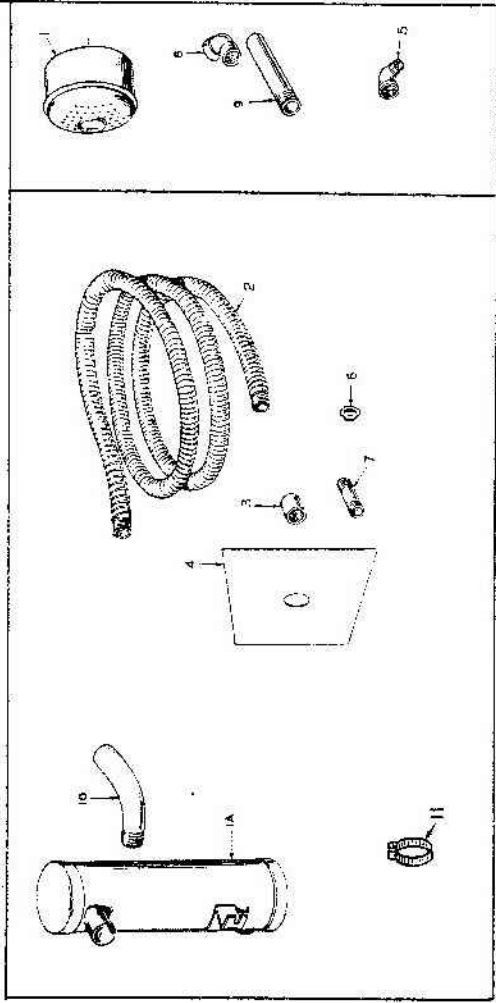


FIG. 12 - EXHAUST GROUP

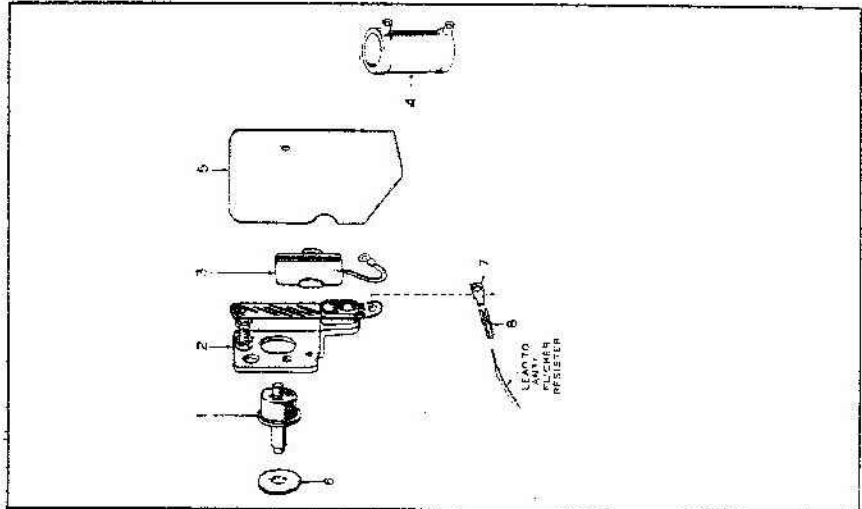


FIG. 13 - ANTI-FLICKER GROUP

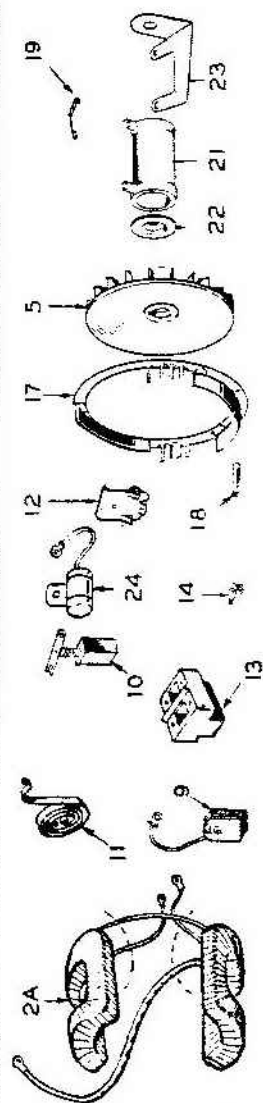
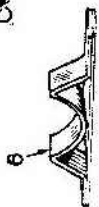
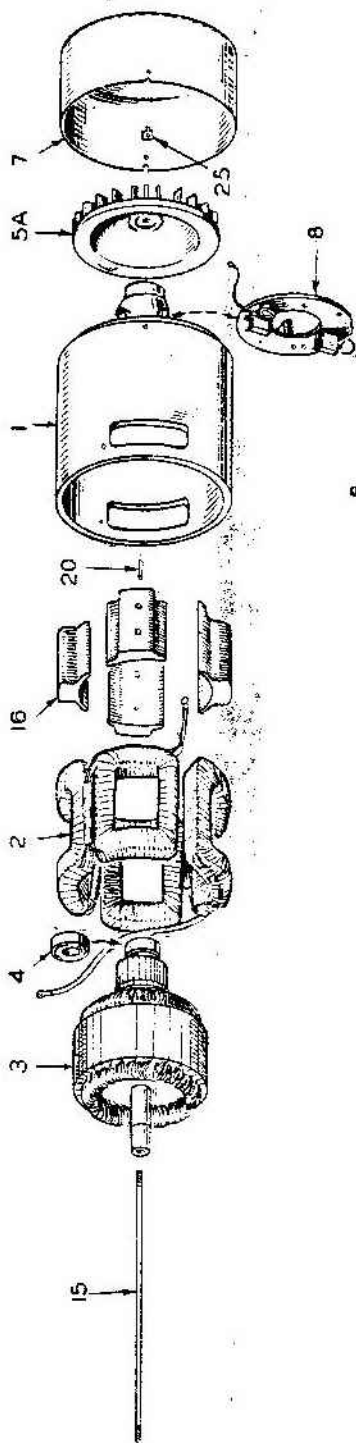


FIG. 14 - GENERATOR GROUP

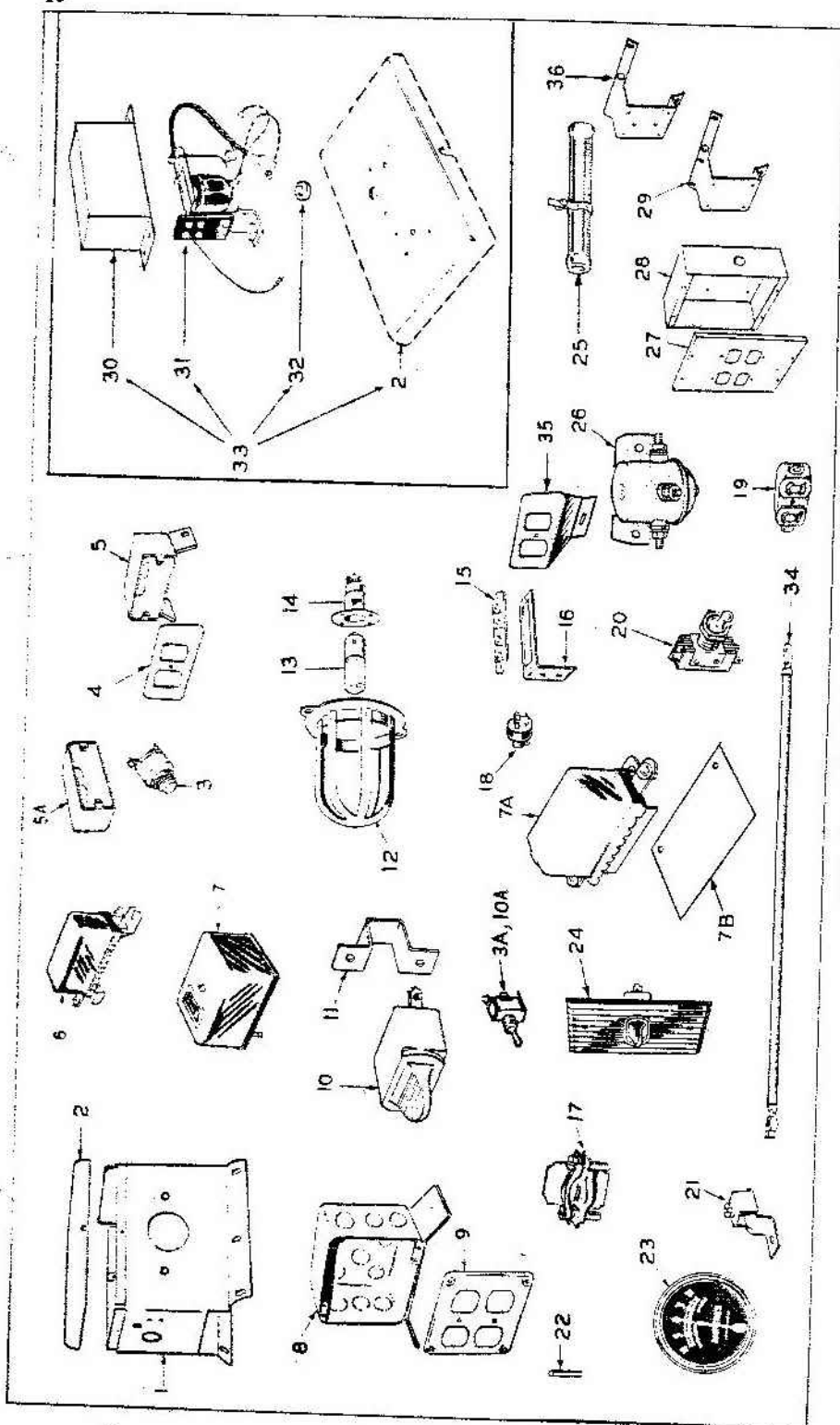


FIG. 15 - CONTROL GROUP

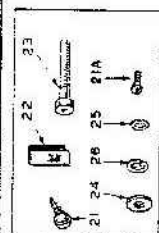


FIG. 16 - RECOIL ROPE STARTER GROUP

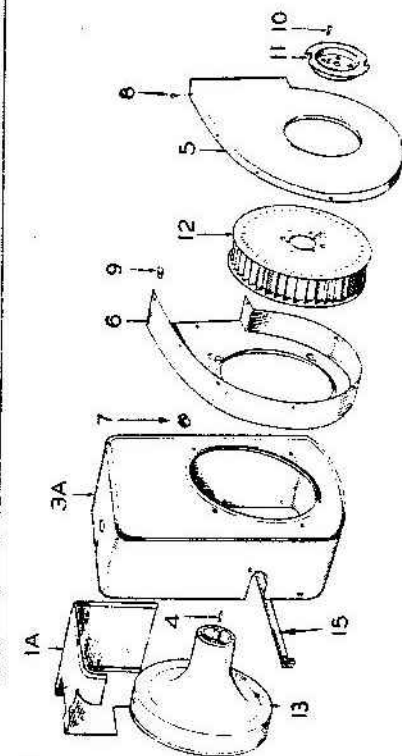


FIG. 17 - AIR HOUSING & VACU-FLO COOLING GROUP

REF. NO.

PART NO.

QUANT. USED

DESCRIPTION

FIG. 1 - CYLINDER BLOCK & OIL BASE GROUP

1	110A901	1	Block Assembly, Cylinder - Includes parts marked †.
	110K874	1	Parts Key Nos. 8 & 9.
2	110A441	2	Parts Key Nos. 1 through 7, & 10.
3	110A68	1	† Guide Valve Guide
4	110A826	1	† Gasket, Intake Valve Guide
5	101K257	1	† Insert, Exhaust Valve Seat
6	520A363	2	† Gasket Kit, Bearing Plate to Engine (one .015", two .006")
7	101A49	2	† Stud, Carburetor Mounting
8			† Bearing, Camshaft
	101C233	1	Plate, Rear Bearing - Generator to Engine Adapter - Excludes Bearing.
	101C252	1	† Parts Key Nos. 1 through 7, & 10.
9	101B290		† Parts Key Nos. 8 & 9.
10	509-1	1	† Bearing Crankshaft - Front or Rear - Std. -.002 - .020 - Precision Type (Replaces 101A234)
			Seal, Oil - Crankshaft Rear
			Base, Oil
			Parts Key Nos. 1, 2, 6 & 7.
11	102D313	1	Prior to Serial #627846 (3 Pint)
11A	102D439	1	Begin Serial #627846 (3-1/2 Pint)
11B	102D439	1	Parts Key Nos. 3, 4, 5, 8, & 10 (Replaces #102D314)
12	102A319	1	Pan, Oil - Parts Key No. 9
12A	102B18	1	Gasket, Oil Base or Pan (Replaces #102B348)
13	403B381	1	Bracket, Engine Mounting - Parts Key No. 9
			Cushion, Rubber Mounting - Upper
			Parts Key Nos. 1, 2, 6 & 7
	402A44	4	Prior to Serial #637846
	402A76	4	Begin Serial #637846
			Parts Key Nos. 3, 4, 5, 8, & 10
	402A44	4	Prior to Serial #632290
	402A76	4	Begin Serial #632290
			Parts Key No. 9
13A	402A140	2	Cup, Centering - Upper Cushion - Generator End - Parts Key No. 9

† - Parts in Cylinder Block Assembly.

FIG. 1 - CYLINDER BLOCK & OIL BASE GROUP (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
14	402A45	4	Cushion, Rubber Mounting - Lower
			Parts Key Nos. 1 through 8, & 10
	402A45	2	Parts Key No. 9
	402A144	2	Generator End
15			Engine End
	402A48	4	Bushing, Spacer - Mounting Cushions
	402A141	4	Parts Key Nos. 1, 2, 6, & 7
			Prior to Serial #637846
			Begin Serial #637846
	402A48	4	Parts Key Nos. 3, 4, 5, 8, & 10
	402A141	4	Prior to Serial #632290
			Begin Serial #632290
	402A141	2	Parts Key No. 9
	402A142	2	Generator End
			Engine End
13, 14, 15	402A229	4	Cushion Assembly, Mounting - Includes Cushions and Hardware.
	402B139	1	Parts Key Nos. 1 through 8, & 10 (Replaces #402A49)
			Parts Key No. 9 (Set of 4 Assemblies)
16	110C834	1	Head, Cylinder
	110C1192	1	Gasoline Fuel Models
	110A159	1	Gas Fuel Models
17	505-110	1	Gasket, Cylinder Head
18	516A12	1	Plug, Pipe - 3/8" - Oil Drain
19	505-130	2	† Pin, Dowel - Gear Cover Alignment - Prior to Spec "H"
20	520A526	1	Plug, Pipe - 3/4" - Oil Fill
21	517-48	5	† Stud, Rear Bearing Plate
22	505-76	1	† Plug, Expansion - Rear Camshaft Bearing Opening (Replaces #517-18)
23	505-28	1	Nipple, Pipe - Oil Drain Extension
24	120A12	1	Coupling, Pipe - Oil Drain Extension
25	120A140	1	Plunger, Oil By-Pass - Parts Key Nos. 8 and 9.
26		1	Spring, Oil By-Pass Plunger - Parts Key Nos. 8 and 9.

† - Parts in Cylinder Block Assembly.

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 1 - CYLINDER BLOCK & OIL BASE GROUP (Cont.)

27	120A389	1	Cup and Pipe, Oil Pump Intake - Parts Key Nos. 8 and 9
	120A571	1	Prior to Spec "G"
28	120A200	1	Begin Spec "G" (Replaces #120A494)
	120A394		Pump, Oil - Parts Key Nos. 8 and 9 (Parts not sold separately)
	120K161		Prior to Spec "G"
29	526A122	1	Begin Spec "G"
30		1	Gasket Kit, Oil Pump - Parts Key Nos. 8 and 9.
31		7	Washer, Cylinder Head
	110A879	4	Screw, Hex Head - Cylinder Head (Hardened)
	110A284	3	5/16-18 x 1-1/4"
32	526A127	3	5/16-18 x 1-1/2"
33	120A387	1	Washer, Oil Pan Mounting - Parts Key No. 9.
34	505-274	1	† Line, Oil - Internal to Rear Main Bearing - Parts Key Nos. 8 and 9.
35	505-54	1	Plug, Oil By-Pass - 1/8" x 1/4" - Parts Key Nos. 8 and 9.
		1	Plug, Square Head Pipe - 1/4" - Oil Drain - Parts Key No. 9.

† - Parts in Cylinder Block Assembly.

FIG. 2 - VALVE & BREATHER GROUP

1	110B828	1	Valve, Intake.
2	110B827	1	Valve, Exhaust - Stellite.
3	110A609	2	Spring, Valve.
4	110A558	1	Retainer, Valve Spring - Intake (Exception: One used on exhaust also on gas fueled plants).
5	110A540	1	Rotocap, Valve - Exhaust (Exception: None used on gas fueled plants).
6	110A8	4	Lock, Valve Spring Retainer.
7	115A6	2	Tappet, Valve.
8	110B840	1	Cover, Valve Compartment.
9	110A832	1	Gasket, Valve Compartment Cover.
10	123A486	1	Valve, Breather - With 5/16" Ball.
11	503A271	1	Hose, Breather - 7/16" x 5-1/4".
	800-15	1	Screw, Hex Head Cap - 1/4"-20 x 3" - Valve Cover.
	526-63	1	Washer, Flat - Copper - Valve Cover Screw.

REF. PART
NO. NO.QUANT.
USED

DESCRIPTION

FIG. 3 - GEAR COVER GROUP

1			Cover Assembly, Gear - Includes parts marked †.
	103C141	1	Prior to Spec "H".
	103C222	1	Begin Spec "H".
2		1	† Cover, Gear - Not Sold Separately.
3	516-117	1	† Pin, Roll - 3/16" x 13/16" - Governor Cup Stop
4		1	† Arm and Shaft, Governor.
	150A575	1	Prior to Spec "H".
	150A789	1	Begin Spec "H".
5	150A177	1	† Stud, Governor Sensitivity Adjusting.
6	150A620	1	† Yoke, Governor Shaft - Includes Retainer Ring #518-129 (Replaces #150A236)
7	526-140	1	Washer, Flat - Governor Yoke - Not used on later Models.
7A	518-129	1	† Ring, Governor Yoke Retainer.
8	516-36	1	Pin, Cotter - 1/16" x 3/8" - Not used on later Models.
9	509-8	1	† Seal, Oil - Governor Shaft
10	510-8	1	† Bearing, Governor Shaft - Lower
11	510-13	1	† Bearing, Governor Shaft - Upper
12	510-14	1	† Ball, Governor Shaft Thrust
13	150A156	1	† Bracket, Governor Spring
14	509A12	1	† Seal, Oil - Crankshaft - Front
15	150A98	1	Spring, Governor
16	150A213	1	Stud, Governor Spring Tension Adjusting
		1	Nut, Governor Adjusting
17	870-131	1	Parts Key Nos. 1, 2, 3, 4, 8, 9, & 10 (Small) Replaces #150A89.
18	150A33	1	Parts Key Nos. 5, 6, & 7 (Large)
19	150A198	1	Cover, Governor Spring - Prior to Spec "H".
20	103B13	1	Gasket, Gear Cover.
21		1	Link, Governor Arm to Carburetor.
	150A578	1	Prior to Spec "H".
	150A786	1	Begin Spec "H".
22	518-4	1	Clip, Governor Link to Carburetor.

† - Parts in Gear Cover Assembly.

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 3 - GEAR COVER GROUP (Cont.)

Joint, Ball - With #10-32 Thread (Replaces #150A300)

23 150A639 1

FIG. 4 - CRANKSHAFT, CAMSHAFT, & GOVERNOR CUP GROUP

Crankshaft.

For plants with Parts Key Nos. 8 and 9.

For plants with Parts Key Nos. 1 through 7, and 10.

Washer, Crankshaft Gear.

Ring, Lock - Crankshaft Gear Washer.

Gear Set, Timing - Crankshaft and Camshaft.

Camshaft and Pin Assembly.

Cup, Governor.

Plate, Governor Ball.

Spacer, Governor Ball.

Key, Gear.

Ring, Lock - Camshaft Center Pin.

Washer, Camshaft Thrust.

Ball, Fly - Governor.

Parts Key Nos. 8 and 9.

Parts Key Nos. 1 through 7, and 10.

Pin, Center - Camshaft.

1 104C265 1
 2 104C236 1
 3 104A50 1
 4 518-12 1
 5 105-71 1
 6 105A139 1
 7 150B612 1
 8 150A77 1
 9 150B85 1
 10 515-1 2
 11 150A78 1
 12 105A4 1
 510-15 5
 510-15 10
 13 150A75 1

FIG. 5 - PISTON & CONNECTING ROD GROUP

Piston and Pin Assembly - Specify: Standard or .010", .020", .030" Oversize.

Pin, Piston - Specify: Standard or .002" Oversize.

Ring, Retaining - Piston Pin.

Ring Set, Piston - Specify: Standard or .010", .020", .030" Oversize.

Rod, Connecting - Specify: Standard or .20" Undersize (Replaces #114A85).

1 112A75 1
 2 112A20 1
 3 112A13 2
 4 113-12 1
 7 114C95 1

FIG. 5 - PISTON & CONNECTING ROD GROUP (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
8			Dipper, Oil - Connecting Rod.
9	114A89	1	For Plants with Parts Key Nos. 1 through 7, and 10.
10	114A23	2	Screw, Hex Head - Connecting Rod Cap. (Hardened)
	854-14	2	Washer, Lock - IT Shakeproof - Connecting Rod Cap Screw.

FIG. 6 - MAGNETO IGNITION GROUP

1			Flywheel, Magneto.
			For Pressure Cooled Plants.
	160C459	1	Parts Key Nos. 1 through 7, and 10.
	160C460	1	Parts Key Nos. 8 and 9.
			For Vacu-Flo Cooled Plants.
1A			Parts Key Nos. 1 through 7.
	160C470	1	Prior to Spec "H".
	160C672	1	Begin Spec "H".
	160C466	1	Parts Key Nos. 8 and 9 - Prior to Spec "H".
2	526-141	1	Washer, Flywheel Mounting.
3	515A113	1	Key, Flywheel Mounting.
4	160A487	1	Plate Assembly, Magneto - Includes parts Marked † (Replaces #160A448)
5	160A454	1	† Backplate and Pole shoe.
6	160B155	1	† Coil, Magneto.
7	160K540	1	† Point Set, Contact (Replaces #160P456).
8	812-77	2	† Screw, Round Head - Condenser & Point Set Mounting - #8-32 x 3/8".
9	812-59	1	† Screw, Round Head - Stop Lead to Point Set - #6-32 x 1/4".
10			† Lead, Stop
	336A1025	1	Parts Key Nos. 1, 3, 8, 9, and 10.
	336A345	1	Parts Key Nos. 2, 4, 5, 6, and 7.
11	312A33	1	† Condenser
12	167A1272	1	† Lead, Hi-Tension - Spark Plug.

† - Parts in Magneto Backplate Assembly.

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 6 - MAGNETO IGNITION GROUP (Cont.)

13	167-28	1	Plug, Spark.
14	167A67	1	Shield Assembly, Spark Plug - Includes Clamp #167A64.
15	192A23	1	Rope and Handle, Manual Starting.
16	167A64	1	Clamp Only, Spark Plug Shield.
17	104A237	1	Screw, Hex Head - Pilot Center - Flywheel Mounting.
18	192B261	1	Sheave, Rope - Manual Starting.

FIG. 7 - CARRYING FRAME & DOLLY GROUP

NOTE: The Dolly equipment is not designed for Portable Models (Parts Key No. 9)

1	403K365	1	Frame, Carrying.
	403A455	1	★ Parts Key Nos. 1, 3, 8, and 10 (Optional - Includes Hardware) Parts Key No. 9 (Std. Equipment) NOTE: Complete Assembly includes mfg. Cushions, Channels, etc. (Replaces Nos. 403A388 and 403A389)
2	410C219	1	Dolly Assembly - Two Wheel - Includes parts marked † plus hardware.
3	410D216	1	† Base and Handle, Dolly - Right Hand.
4	410D215	1	† Base and Handle, Dolly - Left Hand.
5	402A40	2	† Cushion, Rubber - Dolly Foot.
8	403-205	2	† Grip, Rubber - Dolly Handle.
9	410B222	1	† Axle, Dolly.
10	410P223	2	† Wheel and Tire, Dolly - 10 x 2.50.
11	337A51	1	Strap, Bond (Ground) Blower Housing to Frame.
	337A44	1	Parts Key Nos. 9 (3 inch)
	402A170	2	★ Channel, Engine Mounting (NOTE: Used only with #403A455 Carrying Frame) - Parts Key No. 9.

† - Parts in Dolly Assembly.

★ - See note at end of group.

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 7 - CARRYING FRAME & DOLLY GROUP (Cont.)

13	402A171	4	★ Support, Engine Mounting Channel (NOTE: Used only with #403A455 Carrying Frame Parts Key No. 9.
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★ - Two types of Carrying Frames were used, (A) Obsolete type #403A388. #403A389 had ROUND mounting holes in the frame and used CAPSCREWS; (B) Superceding type #403A455 has SQUARE mounting holes in the underside of the frame to permit the use of CARRIAGE BOLTS. This Assembly, also uses (2) Engine Mounting Channels #402A170 and (4) Channel Supports #402A171.

FIG. 8 - GASOLINE FUEL SYSTEM GROUP
(See also Optional Gas Fuel System Group)

NOTE: Fuel system parts are arranged in sub-groups according to type of fuel tank used.

STANDARD PARTS USED ON ALL MODELS.

2	140A369	1	Cleaner, Air.
2A	140B441	1	Dry Type - Complete - Prior to Serial #566319.
3			Oil Bath Type - Begin Serial #566319 - Includes Cup.
			Gasket.
	145A111	1	Air Cleaner to Carburetor - Prior to Serial #566319.
	145A111	1	Adapter to Carburetor - Begin Serial #566319.
4	145A110	1	Gasket, Spacing - Carburetor Flange.
5	149B79	1	Filter, Fuel (Location Varies).
6	149D693	1	* Pump, Fuel (When used) - Replaces #149C559 or #149D687.
7	149A3	1	Gasket, Oil Bath Air Cleaner to Adapter - Begin Serial #566319.
8	140A443	1	Adapter, Oil Bath Air Cleaner to Carburetor - Includes Breather Connections - Begin Serial #566319.
9	140B446	1	Stud, Air Cleaner - 3/16" x 7-3/8" - Begin Serial #566319.
10	520A538	1	Bowl, Fuel Filter.
11	149-150	1	

* - Standard equipment for plants with Parts Key No. 4 Prior to Spec "H" (Optional on all other models) - Standard equipment on all models Begin Spec "H" except Parts Key Nos. 2, 6 and 7 (optional on these models)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 8 - GASOLINE FUEL SYSTEM GROUP (Cont.)
(See also optional Gas Fuel System Group)

12	149A149	1	Gasket, Fuel Filter Bowl.
13	149E469	1	Cup, Air Cleaner - Plastic - Begin Serial #566319 (Includes Gasket)
13A	140P587	1	Knob, Plastic - Oil Bath Air Cleaner Mounting - Begin Serial #566319.

PLANTS WITH MOUNTED FUEL TANK

1			Carburetor
	143B66	1	Parts Key Nos. 1, 3, 5, 6.
	143B73	1	Parts Key Nos. 8, 9, 10.
15			Tank, Fuel - Mounted.
	159B488	1	Parts Key No. 6 (Also used, Prior to Spec "H" Parts Key Nos. 1, 3, 5, 8, 9, 10) Cylindrical Type (1.4 gallon)
15A	159B234	1	Parts Key Nos. 3, 10 - Begin Spec "H" - Rectangular Type (2 gallon)
15A	159B722	1	Parts Key Nos. 1, 8, 9 - Begin Spec "H" - Rectangular Type (1.3 gallon)
16	159A7	1	Cap, Fuel Tank (Replaces #159A80)
			Bracket, Fuel Tank Mounting.
17	159C486	1	Parts Key No. 5, 6 (Also used Prior to Spec "E" - Parts Key Nos. 1, 3, 8, 9, 10) Mounts Tank on Side of Engine.
17A	159C623	1	Parts Key Nos. 1, 3, 8, 9, 10 - Spec "E" through "G" - Mounts Tank over Generator (Also mounts receptacle Box)
17B	159D721	1	Parts Key Nos. 1, 8, 9 - Begin Spec "H"
17B	159D717	1	Parts Key Nos. 3, 10 - Begin Spec "H"
18	159A154	2	Band, Fuel Tank Mounting - For Cylindrical Type Tank.
18A	159B718	1	Bracket, Fuel Tank Hold Down - Parts Key Nos. 1, 3, 8, 9, 10 Begin Spec "H".
19			Connector, Inverted - 1/4" Tube x 1/8" Pipe.
			Models WITHOUT Fuel Pump
	502-3	1	Tank Outlet - Spec "A" only.
	502-3	1	Filter Outlet - Spec "E" through "G".
			Models WITH Fuel Pump
	502-3	2	Fuel Pump Outlet or Carburetor Inlet

REF. NO. PART NO. QUANT. USED

DESCRIPTION

FIG. 8 - GASOLINE FUEL SYSTEM GROUP (Cont.)

(See also optional Gas Fuel System Group)

Connector, Inverted - 1/4" x 1/8" Pipe (Cont.)

Models WITH Fuel Pump

502-3 1

Tank Outlet - Prior to Spec "E".

502-3 1

Filter Outlet - Spec "E" through "G".

502-3 1

Filter Inlet - Parts Key Nos. 1, 3, 8, 9 and 10 Begin Spec "H".

20 502-82 1

Nipple, Pipe - 1/8" - Filter Mounting.

Line, Fuel - Models WITHOUT Fuel Pump

21 159B504 1

Spec "A" - Tank Outlet to Filter.

22 149A538 1

Spec "A" Models only.

23 159B538 1

Spec "B" through "D" - Filter to Carburetor.

24 159C633 1

Spec "E" through "G" - Filter to Carburetor.

25 159B538 1

Begin Spec "H" - Filter to Carburetor - Parts Key No. 6.

Line, Fuel - Models WITH Fuel Pump

26 159B504 1

Prior to Spec "E" - Tank to Filter.

27 159B637 1

Spec "E" through "G" - Filter to Pump

28 159A728 1

Begin Spec "H" - Tank to Filter

29 159A727 1

Parts Key Nos. 3, 10

31 149A561 1

Used on All Specs - Fuel Pump to Carburetor.

Elbow, Inverted - 1/4" Tube x 1/8" Pipe.

Models WITH Fuel Pump

502-2 1

Filter Inlet - Prior to Spec "E".

502-2 1

Tank Outlet Begin Spec "H".

Models WITHOUT Fuel Pump

502-2 1

Filter Inlet - Spec "A" only

502-2 1

Carburetor Inlet

32 502-65 1

Filter Outlet - 45° - Spec "B" through "D" and Begin Spec "H" Parts Key No. 6 Models.

33 149A254 1

Bracket and Elbow - Fuel Filter Mounting - Spec "A" Models.

35 149A136 1

Cover, Fuel Pump Hole - Models without Fuel Pump Begin Spec "B".

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 8 - GASOLINE FUEL SYSTEM GROUP (Cont.)
(See also optional Gas Fuel System Group)

PLANTS WITH SEPARATE FUEL TANK

1			Carburetor
	143B68	1	Parts Key Nos. 2, 4.
	143B66	1	Parts Key No. 7.
19	502-3	2	Connector, Inverted - 1/4" Tube x 1/8" Pipe Thread - Carburetor Inlet and Fuel Pump Outlet - Parts Key No. 4.
20	502-82	1	Nipple, Pipe - 1/8" - Filler Mounting - Parts Key No. 4.
			Line, Fuel
22	149A588	1	Parts Key Nos. 2, 7 (Filter Bracket to Carburetor)
29	149A561	1	Parts Key No. 4 (Fuel Pump to Carburetor)
31	502-2	1	Elbow, Inverted - 1/4" Tube x 1/8" Pipe Thread - Carburetor Inlet - Parts Key Nos. 2 and 7.
33	149A254	1	Bracket and Elbow - Filter Mounting - Parts Key Nos. 2, and 7.
34	502-20	1	Elbow, Street - 1/8" Pipe - Filter Inlet.
36	415A126	1	Tank, Fuel - 5 Gallon (Replaces other 5 Gallon separate tanks)
37	504A13	1	Valve, Fuel Shut-off - With Strainer - Mounts in 1/8" Pipe Thread Bottom Outlet in Tank.
38	415B124	1	Cap, Rain - Rubber - (With provision for inserting fuel Line)
39	501A27	1	Line Fuel - Flexible - Tank to Filter (NOTE: This line is 48" long, with swivel at one end and 1/8" pipe thread at the other end. Remove one fitting if installing through rain cap)

FIG. 9 - GASOLINE CARBURETOR PARTS GROUP

Carburetor.

	143B66	1	For Plants with Parts Key Nos. 1, 3, 5, 6, and 7.
	143B68	1	For Plants with Parts Key Nos. 2 & 4.
	143B73	1	For Plants with Parts Key Nos. 8, 9, & 10.
	143K80	1	**Gasket Kit, Carburetor - Includes parts marked*.
	143K81	1	Repair Kit, Carburetor - Includes parts marked ** and *.
	145A110	1	*Gasket, Spacing - Carburetor Mounting Flange.
1	143-97	1	Valve, Throttle.
			* Parts in Gasket Kit.
			** Parts in Repair Kit.

FIG. 9 - GASOLINE CARBURETOR PARTS GROUP (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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2	143-98	1	Shaft & Lever, Throttle.
3	143-99	1	Valve, Choke.
4	143-78	1	** Needle, Idle Jet and High Speed Adjusting.
5	143-30	1	Plug, Idle Passage.
			Shaft, Choke
7	143-100	1	For Plants with Parts Key Nos. 2 & 4.
8	143-101	1	For Plants with Parts Key Nos. 1, 3, 5, 6, 7, 8, 9, & 10.
9	143-118	1	Screw and Gasket, Bowl Retaining.
10	143A15	1	* Gasket, Fuel Inlet Valve.
11	143-36	1	* Gasket, Bowl Retaining Screw.
12	143-105	1	Float.
13	143-106	1	Bowl.
14	143-77	1	* Gasket, Bowl.
15	143-107	1	Pin, Float Lever.
16	143-39	1	** Valve, Fuel Inlet.
17	143-109	1	Screw, Idle Adjustment.
18	143-110	1	Plug, Expansion.
19	143-111	1	Spring, Throttle Lever Adjusting Screw.
20	143-112	1	Spring, Idle Adjusting Screw.
21			Spring, Choke Shaft.
			For Plants with Parts Key Nos. 1, 3, 5, 6, 7, 8, 9, & 10.
22	143-113	1	Spring, High Speed Adjusting Needle.
23	143-115	1	Screw, Throttle Lever Adjusting.
24	812-14	4	** Screw, Round Head - #3-48 x 3/16" - Choke and Throttle Valve Attaching.
25			Ball, Choke Shaft.
			For Plants with Parts Key Nos. 1, 3, 5, 6, 7, 8, 9, & 10.
	143-117	1	* Parts in Gasket Kit.
			** Parts in Repair Kit.

PARTS LIST

DESCRIPTION

REF. NO. PART NO. QUANT. USED

FIG. 10 - FUEL PUMP PARTS GROUP

1	149D693	1	Pump, Fuel - With primer lever (Replaces #149C559 or #149D687).
2	149K526	1	Repair Kit, Fuel Pump - Includes parts marked †.
3			Body, Upper - Not sold separately.
4	815-148	4	Screw, Hex - Self Tapping - #8-32 x 7/8" - Body Assembly.
5	815-147	2	Screw, Phillips Flat Head - Self Tapping - #6-32 x 5/8" - Valve Retainer.
6	149-96	2	† Valve and Cage.
7	149A95	2	† Gasket, Valve.
8	149A582	1	† Diaphragm and Pull Rod.
9	149A672	1	† Spring, Diaphragm (Replaces #149A93)
10	149A539	1	Retainer, Valve.
11	149A675	1	† Spring, Rocker Arm (Replaces #149A94).
12	516A113	1	Pin, Rocker Arm.
13			Body, Lower - Not Sold Separately.
14	149-710	1	Arm and Link Set, Rocker - Sold only as a set (Replaces previously used Arm & Link)
15	149A551	1	Lever, Primer.
16	509-65	2	Seal, "O" Ring.
17	149A404	1	Spring, Primer Lever.
18	149A3	1	† Gasket, Mounting Flange.
	518-129	1	Ring, Retaining - Primer Lever.
			† Parts in Repair Kit.

FIG. 11 - ELECTRIC CHOKE PARTS GROUP

NOTE: For plants with Parts Key Nos. 2 and 4.

1	153A196	1	Adapter, Choke to Carburetor.
2	153A58	1	Bracket Housing.
3	153A17	1	Element, Bimetal.
4	153A114	1	Cover Assembly, Includes 24 Volt heating element.

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 12 - EXHAUST GROUP			
1			Muffler, Exhaust. Prior to Spec "H".
	155B488	1	Parts Key Nos. 1 through 7, and 10.
	155B487	1	Parts Key Nos. 8 and 9. Begin Spec "H".
1A	155D692	1	For Pressure Cooled Models.
1A	155C696	1	For Vacu-Flo Cooled Models.
2			Tube, Exhaust - Flexible.
	155B490	1	Prior to Spec "H" - Parts Key Nos. 2, 4, & 7.
	155B727	1	Begin Spec "H" - Parts Key Nos. 2, 4, 6, 7 and 8.
3	505-29	1	Coupling, Pipe - 3/4" - Exhaust Tube - Parts Key Nos. 2, 4, & 7 Prior to Spec "H".
4	155B295	1	Plate, Wall - Exhaust Extension - Parts Key Nos. 2, 4 & 7 (Replaces 155A293) - Prior to Spec "H".
5	505-51	1	Elbow, Street - 3/4" x 90° - Prior to Spec "H".
6	331-38	1	Locknut, Chase - 3/4" - Exhaust.
7			Nipple Pipe - Muffler. Prior to Spec "H"
	505-332	1	For Pressure Cooled Models.
	505-162	1	For Vacu-Flo Cooled Models. Begin Spec "H"
			For Vacu-Flo Cooled Models.
	505-102	1	For Vacu-Flo Cooled Models.
8	505-132	1	Elbow, Pipe - 3/4" x 90° - Exhaust - Vacu-Flo Cooled Models Begin Spec "H".
9	505-431	1	Nipple, Half - 3/4" x 6-1/2" - Exhaust - Vacu-Flo Cooled Models Begin Spec "H".
10	155A691	1	Tube, Muffler - Curved - Exhaust - Pressure Cooled Models Begin Spec "H".
11	503-189	1	Clamp, Muffler - Begin Spec "H".

FIG. 13 - ANTI-FLICKER GROUP

NOTE: For plants with Parts Key Nos. 1, 2, 3, 4, (Also used on Parts Key No. 10 Prior to Spec "H")			
1	160A447	1	Plunger Assembly - Includes plunger, guide and diaphragm - less gasket #160A461.
2	160B478	1	Point Set, Contact.

REF. NO. PART NO. QUANT. USED

DESCRIPTION

FIG. 13 - ANTI-FLICKER GROUP (Cont.)

3	312A19	1	Condenser - 0.5 Mfd.
4			Resistor, Fixed (mounted in generator)
			Parts Key Nos. 1 & 2.
	304A250	1	50 Cycle Plants - Prior to Spec "H".
	304A315	1	60 Cycle Plants - Prior to Spec "H".
	304-491	1	60 Cycle Plants - Begin Spec "H".
			Parts Key Nos. 3 and 4.
	304-321	1	Prior to Spec "H".
	304A168	1	Begin Spec "H".
	304-159	1	For 115 Volt DC Model - Parts Key No. 10 - Prior to Spec "H" only.
5	166A254	1	Cover, Contact Points.
6	160A461	1	Gasket, Plunger Guide.
7	332A527	1	Terminal, Solderless - Male.
8	332P529	1	Terminal, Solderless - Female.
	815-187	1	Screw, Round Head - Self Tapping - #10-32 x 1-1/4" - Cover Mounting.

FIG. 14 - GENERATOR GROUP

1	★	1	Frame - Machined and Drilled - less coils and poleshoes
2			Coil Set - Set of coils wired together.
			Parts Key No. 1 (Set of 4) - See Spec
	222A1405	1	Prior to Spec "H".
	222A1578		Begin Spec "H".
			Parts Key No. 3 (Set of 4) - See Spec
	222A1404	1	Prior to Spec "H".
	222A1577	1	Begin Spec "H".
			Parts Key No. 3 - (Set of 4) - See Spec
	222A1407	1	Prior to Spec "H".
	222A1574	1	Begin Spec "H".

★ - Order by Part Description - Give Complete Plant Model and Serial Number.

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
			FIG. 14 - GENERATOR GROUP (Cont.)
			Coil Set - Set of coils wired together (Cont.)
			Parts Key No. 4 (Set of 4) - See Spec
			Prior to Spec "H".
			Begin Spec "H".
			Parts Key No. 5 (Set of 4).
			Parts Key No. 6 (Set of 4).
			Parts Key No. 7 (Set of 4) - See Spec
			Spec "A" only.
			Begin Spec "B".
			Parts Key No. 10 (Set of 4) - See Spec
			Prior to Spec "H".
			Begin Spec "H".
			Parts Key Nos. 8 and 9 (Set of 2)
			Armature
			Parts Key Nos. 1 and 2 - See Voltage & Spec.
			For 120 Volt, Spec "A".
			For 120 Volt, Spec "B" through "G".
			For 120 Volt, Begin Spec "H".
			For 240 Volt, Spec "A".
			For 240 Volt, Spec "B" through "G".
			For 240 Volt, Begin Spec "H".
			Parts Key Nos. 3 and 4 - See Voltage & Spec (Includes bearing)
			For 120 Volt, Prior to Spec "H".
			For 120 Volt Begin Spec "H".
			For 240 Volt Prior to Spec "H".
			For 240 Volt Begin Spec "H".
			Parts Key No. 5 (Includes bearing)
			Parts Key No. 6 - See Spec
			Spec "A" only
			Begin Spec "B".
			Parts Key No. 7 - See Spec
			Spec "A" Models only
			Begin Spec "B".
2A	222A1400	1	
	222A1573	1	
	222A1415	1	
	222A1408	1	
	222A1410	1	
	222A1450	1	
	222A1525	1	
	222A1583	1	
	222A1439	1	
2A			
3			
	201A687	1	
	201A796	1	
	201A1081	1	
	201A722	1	
	201A797	1	
	201A1081	1	
	201A677	1	
	201A1072	1	
	201A721	1	
	201A1073	1	
	201A698	1	
	201A690	1	
	201A794	1	
	201A692	1	
	201A793	1	

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 14 - GENERATOR GROUP (Cont.)			
	Armature (Cont.)		
	201A801	1	Parts Key Nos. 8 and 9 - See Voltage & Spec (Includes bearing) Cont.
	201A765	1	For 120 Volt, 50 Cycle.
	201A822	1	For 120 Volt, 60 Cycle.
	201A776	1	For 240 Volt, 50 Cycle.
		1	For 240 Volt, 60 Cycle.
	201A929	1	Parts Key No. 10 - 115 Volt, DC Plant - See Spec
	201A1075	1	Prior to Spec "H".
4	510A47	1	Begin Spec "H".
5	205B47	1	Bearing, Ball - Armature - Parts Key Nos. 3, 4, 5, 8, 9, & 10.
5A	205B56	1	Blower, Armature - ENGINE END - Parts Key Nos. 3, 4 & 5 Prior to Spec "H"
		1	Blower, Armature - BRUSH RIG END
		1	Parts Key Nos. 8, 9, and 10
		1	Parts Key Nos. 6 and 7 Begin Spec "B".
		1	Parts Key Nos. 3 and 4 Begin Spec "H".
6	232B1282	1	Bracket, Generator Support - Parts Key No. 9.
7			Cover, End, - Generator
			Prior to Spec "F".
	232C1214	1	Parts Key Nos. 1, 2, 3, 4, & 5.
	232C1214	1	Parts Key Nos. 6 and 7 Spec "A" only.
	234C4	1	Parts Key Nos. 6, 7, 8 & 9 Spec "B" through "E".
			Spec F & G.
	234C41	1	Parts Key Nos. 1, 2, 3, 4, & 5.
	234C34	1	Parts Key Nos. 6, 7, 8, 9 & 10.
			Begin Spec "H".
	234C125	1	Parts Key Nos. 1 and 2.
	234C127	1	Parts Key Nos. 3, 4, 6, 7, 8, 9 & 10.
			Rig Assembly, Brush - Includes Brushes and Springs
			Parts Key Nos. 1 and 2
			Prior to Spec "H"
			Begin Spec "H"
8	212C212	1	Parts Key Nos. 3 and 4.
	212C265	1	Parts Key No. 5 (Replaces #212C220)
	212C209	1	
	212C226	1	

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
			FIG. 14 - GENERATOR GROUP (Cont.)
			Rig Assembly, Brush - Includes Brushes and Springs (Cont.)
	212C214	1	Parts Key Nos. 6 and 7 - See Spec
	212C328	1	Spec "A" only.
	212C253	1	Spec "B" through "E"
	212C215	1	Begin Spec "F"
	212C245	1	Parts Key Nos. 8 and 9.
			Parts Key No. 10.
9			Brush Commutator
	214A41	4	Parts Key Nos. 1, 2, 3 & 4.
	214A58	4	Parts Key No. 5.
			Parts Key Nos. 6 & 7 - See Spec
	214A12	4	Spec "A" Only
	214A44	4	Begin Spec "B"
	214A1	2	Parts Key Nos. 8 and 9.
	214A39	4	Parts Key No. 10.
10			Brush, Collector Ring.
	214A21	2	Parts Key Nos. 1 and 2 - Includes Spring
	214A59	4	Parts Key Nos. 3, 4, 8 & 9 - Includes Spring (Replaces #214A35)
11			Spring, Commutator Brush
	212A1003	4	Parts Key Nos. 1, 2, 3, 4, & 10 (NOTE: Also used on Parts Key Nos. 8 & 9, qty. used is 2)
			Parts Key Nos. 6 and 7 - See Spec
	212A1003	4	Spec "A" Only
12	212A1105	4	Begin Spec "B"
	212A1108	4	Parts Key No. 5.
13			Block, Guide - Collector Ring Brush.
	212A1041		Parts Key Nos. 1 and 2.
	212A1064		Parts Key Nos. 3, 4, 8 & 9.
14			Clip, Retainer - Collector Ring Brush.
			Parts Key Nos. 1 and 2.
	212A1042	1	Inner Brush
	212A1045	1	Outer Brush

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 14 - GENERATOR GROUP (Cont.)

15			Stud, Armature
	520A385	1	Parts Key Nos. 1 and 2 - See Spec
	520A510	1	Spec "A" Only.
			Begin Spec "B".
	520A274	1	Parts Key Nos. 3 and 4 - See Spec.
	520A56	1	Prior to Spec "H"
	520A519	1	Begin Spec "H"
			Parts Key No. 5.
	520A512	1	Parts Key Nos. 6 and 7 - See Spec
	520A529	1	Spec "A" Only
	520A571	1	Spec "B" through "E"
			Begin Spec "F"
	520A265	1	Parts Key Nos. 8 & 9
	520A572	1	Prior to Spec "H"
			Begin Spec "H"
	520A578	1	Parts Key No. 10
	520A56	1	Prior to Spec "H"
			Begin Spec "H"
16			Shoe, Pole
	221A111	4	Parts Key Nos. 1, 2, 5, 6 & 7
	221B110	4	Parts Key Nos. 3 and 4
	221A115	2	Parts Key Nos. 8 and 9
	221B125	4	Parts Key No. 10
17	234B7	1	Scroll, Generator Air - Parts Key Nos. 3, 4 & 5 Prior to Spec "H"
18	232A1197	2	Spacer, Scroll Mounting - Parts Key Nos. 3, 4 & 5 Prior to Spec "H"
19	232A596	1	Clip, Armature Bearing Stop - Parts Key No. 5
20	520A363	2	Stud, Generator Frame to Engine
21			Resistor, Fixed - Anti-Flicker (Listed in anti-flicker group also)
			Parts Key Nos. 1 and 2 - 60 Cycle
	304A250	1	50 Cycle Plants - Prior to Spec "H"
	304A315	1	60 Cycle Plants - Prior to Spec "H"
	304-491	1	60 Cycle Plants - Begin Spec "H"

FIG. 14 - GENERATOR GROUP (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
			Resistor, Fixed - Anti-Flicker (Cont.)
	304-321	1	Parts Key Nos. 3 and 4
	304A168	1	Prior to Spec "H"
	304-159	1	Begin Spec "H"
22	304A14	2	parts Key No. 10 Prior to Spec "H"
			Washer, Centering - Resistor Mounting - Parts Key Nos. 3 & 4 (Also used on Parts Key No. 10 - Prior to Spec "H")
23	304A304	1	Bracket, Resistor Mounting - Parts Key Nos. 3 & 4 (Also used on Parts Key No. 10 - Prior to Spec "H")
24	312A17	1	Condenser, Commutator Brush
24			Condenser, Collector Ring Brush
	312A15	1	Parts Key Nos. 1, 2, 3, 4, 8 & 9 - See Voltage
	312A58	1	For 120 Volt
25	232A1362	2	For 240 Volt
			Clip, End Bell Cover - Begin Spec "H"

FIG. 15 - CONTROL GROUP

1			Box, Control (Less instruments).
			Parts Key Nos. 2 and 4
	301D1059	1	Prior to Spec "H"
	301D1859	1	Begin Spec "H"
	301D1127	1	Parts Key Nos. 5 (Also used Parts Key No. 6 Prior to Spec "G")
	301D1128	1	Parts Key Nos. 7 (Also used Parts Key No. 6 Spec "G" only)
	301D1868	1	Parts Key Nos. 6 and 7 Begin Spec "H"
2			Cover, Control Box
	301B1060	1	Parts Key Nos. 2, 5, 6 & 7 (Also used on Parts Key No. 4 if no line transfer used) - Prior to Spec "H"
	301B1492	1	Parts Key No. 4 (Used with line transfer) - Prior to Spec "H"
	301C1858	1	Parts Key Nos. 2, 4, 6 & 7 Begin Spec "H"

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 15 - CONTROL GROUP			
3	308A29	2	Switch, Start or Stop - Parts Key Nos. 5, 6 and 7
3A	308-155	2	Prior to Spec "H"
4	330-16	1	Begin Spec "H"
5			Cover, Receptacle Box - Parts Key Nos. 1 and 3 (Prior to Spec "H"), 8 (Prior to Spec "C")
			Box, Receptacle
	323B203	1	Parts Key Nos. 1 and 3 Prior to Spec "E" (Includes Bracket)
	323B203	1	Parts Key No. 8 Prior to Spec "C" (Includes Bracket)
5A	330-5	1	Parts Key Nos. 1 and 3 Spec "E" through "G" (Mts. on fuel tank bracket)
			Relay, Reverse Current
6	307B180	1	Parts Key Nos. 2 and 4
7	307B145	1	Parts Key No. 5
	307B496	1	Parts Key No. 7 (Replaces #307B108)
	307B144	1	Parts Key No. 6 Prior to Spec "G"
7A	307B495	1	Parts Key No. 6 Begin Spec "G"
7B	301A392	1	Insulator, Reverse Current Relay - Parts Key No. 6 Begin Spec "G" & Parts Key No. 7
8			Box, Receptacle
	330R43	1	Parts Key No. 9 Prior to Spec C & Parts Key No. 10 Prior to Spec "H"
	330-28	1	Parts Key Nos. 8, 9 and 10 Begin Spec "H"
			Cover, Receptacle Box
			Prior to Spec "C"
9	330-42	1	Parts Key Nos. 9 and 10
			Spec "C" through "G"
9	330-42	1	Parts Key No. 10
			Begin Spec "H"
9	330-42	1	Parts Key No. 8, 9 and 10
			Switch, Start and Stop - Parts Key Nos. 2 and 4
10	308A166	1	Prior to Spec "H" (Replaces #308-90)
10A	308P154	1	Begin Spec "H"
11	301A974	1	Bracket, Switch Mounting - Parts Key Nos. 2 and 4 Prior to Spec "H"
12	322A22	1	Guard, Pilot Light - Parts Key Nos. 8 and 9 Spec "C" through "G"

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 15 - CONTROL GROUP (Cont.)			
13	322-11	1	Lamp, Pilot Light - Parts Key Nos. 8 and 9 Spec "C" through "G"
	322-59	1	For 120 Volt
	322-21	1	For 240 Volt
14	322A222	1	Receptacle, Pilot Light Lamp - Parts Key Nos. 8 and 9 Spec "C" through "G"
15	322A198	1	Block Terminal - Parts Key Nos. 2, 4, 5, 6 & 7
16	322A198	1	Bracket, Terminal Block - Parts Key Nos. 2, 4, 5, 6 & 7
17	331-27	1	Connector, Romex - Generator Wires - Parts Key Nos. 1, 3, 8 & 9
18	332P215	As Req.	Plug, 3 Prong - Parallel blades (120 Volt)
19	332P216	As Req.	Plug, 3 Prong - Tandem blades (240 Volt)
	332P48	1	Receptacle, Duplex
	332P184	As Req.	Parts Key Nos. 1, 3, 8 & 9 - Spec "A" - 2 Prong
	332-213	As Req.	Parts Key Nos. 1, 3, 8, 9 & 10 - Begin Spec "B" - See voltage
20	308-2	1	For 120 volt (2 parallel blades, 1 grounding pin)
21	332-142	1	For 240 volt (2 Tandem blades, 1 grounding pin)
22	332A125	1	Switch, Hi-Lo Charge Rate - Parts Key Nos. 2 and 4.
23	302A58	1	Terminal, Solderless - Plant Ground - Parts Key Nos. 1, 2, 3, 4, 8 & 9.
	302-64	1	Stud, Battery Cable Connection - Parts Key Nos. 5, 6, and 7 Prior to Spec "H"
	302A62	1	Ammeter, Charge Rate
	302-61	1	Parts Key Nos. 2 and 4
	308A94	As Req.	Parts Key No. 5
24	304A66	1	Parts Key No. 6
25	304A268	1	Parts Key No. 7
	307B40	1	Switch & Plate - Remote Start-Stop - Parts Key Nos. 2 and 4
	307B61	1	Resistor, Adjustable - Charge Rate - Parts Key No. 2 and 4
27	301B1392	1	Prior to Spec "H" (10 Ohm, 50 Watt)
28	301C1373	1	Begin Spec "H" (5 Ohm, 50 Watt)
29	301C1204	1	Switch, Solenoid - Start
30	301B1493	1	Parts Key Nos. 2, 4, 5, & 6
			Parts Key No. 7
			Cover, Receptacle Box - Parts Key Nos. 8 and 9 - Spec "C" through "G"
			Box, Receptacle - Parts Key Nos. 8 and 9 - Spec "C" through "G"
			Bracket, Receptacle Box - Parts Key Nos. 8 and 9 - Spec "C" through "G"
			Cover, Start Disconnect Relay - Parts Key No. 4 Prior to Spec "H" (Used with Line transfer only)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 15 - CONTROL GROUP (Cont)

31	306B28	1	Relay, Start Disconnect - Parts Key No. 4 Prior to Spec "H" (used with line transfer only)
32	508A2	1	Grommet, Start Disconnect Relay Cover - Parts Key No. 4 Prior to Spec "H" (used with line transfer only)
33	300C224	1	Relay and cover Assembly - Parts Key No. 4 Prior to Spec "H" (Used with line transfer only) Includes Ref. Nos. 2, 30, 31 & 32 assembled.
34	416A77	2	Cable, Battery - Parts Key Nos. 2 and 4 28" Long
	416A4	1	6-3/4" Long (Jumper)
35	301B1866	1	Bracket, Receptacle Box Mounting Parts Key Nos. 1 and 3 Begin Spec "H"
36	301C1609	1	Parts Key No. 10 Prior to Spec "H"
36	301C1869	1	Parts Key Nos. 8, 9 & 10 Begin Spec "H"

FIG. 16 - RECOIL ROPE STARTER GROUP (OPTIONAL EQUIPMENT)

NOTE: Starter applicable to pressure cooled plants only.

1	192K270	1	Starter Kit - Complete - Includes Cup and Mounting Ring Prior to Spec "H"
	192K343	1	Begin Spec "H"
2	192P273	1	Cup - Starter Engaging
3			Ring, Adapter - Starter to Engine Housing
	192C269	1	Prior to Spec "H"
	192C341	1	Begin Spec "H"
4	815-191	4	Screw, Machine-Self Tapping.
5	192P274	1	Flange, Middle
6	518-127	1	Ring, Retainer
7	526-142	1	Washer, Brake Retainer
8	192P275	1	Spring, Brake
9	192P276	2	Washer, Brake

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 16 - RECOIL ROPE STARTER GROUP (OPTIONAL EQUIPMENT) (Cont.)

10	192P279	2	Washer, Friction.
11	192P277	1	Lever, Brake.
12	192P278	2	Plate, Friction Shoe.
13	192P280	2	Spring, Friction Shoe.
14	192P281	2	Plate, Spring Retainer.
15	192P282	1	Handle - Includes Washer.
16	192P283	1	Cord only, Rewind Starter.
17	192P284	1	Rotor (Rope Sheave).
18	192P285	1	Spring, Rewind.
19	192P287	1	Pin, Centering.
20	192P286	1	Cover, Starter.
21	809-44	3	Screw, Sheet Metal - #10 x 1/2" - Starter Mounting - Prior to Spec "H"
21A	813-98	4	Screw, Round Head - #10-32 x 3/8" - Starter Mounting - Begin Spec "H"
22	870-119	3	Nut, Tinnerman - "U" Type
23	104A237	1	Screw- with Pilot - Cup Mounting - See Magneto Ignition Group.
24	526-141	1	Washer, Flat - Cup Mounting - See Magneto Ignition Group.
25	856-3	4	Washer, Starter Ring to Engine Housing (NOTE: Quantity of 3 used Prior to Spec "H")
26	850-55	1	Washer, Lock - Cup Mounting - See Magneto Ignition Group.
27	192P339	1	Roller, Rope.
28	192P340	1	Screw, Roller.

FIG. 17 - AIR HOUSING & VACU-FLO COOLING GROUP

NOTE: The letter "V" appears in the MODEL No. of Vacu-Flo cooled plants. Vacu-Flo cooling is an optional, factory installed feature.

1	134C518	1	Shroud, Cylinder Air Prior to Spec "H" Parts Key Nos. 3, 4, 5, 8, 9, and 10.
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REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 17 - AIR HOUSING & VACU-FLO COOLING GROUP (Cont.)			
			Shroud, Cylinder Air (Cont.)
1	134C549	1	Prior to Spec "H"
			Parts Key Nos. 1, 2, 6 and 7.
			Begin Spec "H"
1A	134D1042	1	Parts Key Nos. 1 and 2.
1A	134D1018	1	Parts Key Nos. 3, 4, 7, 8, 9 and 10.
1A	134A1074	1	Parts Key No. 6.
2	313-18	1	Switch, Stop - Parts Key Nos. 1, 3, 8, 9 and 10.
			Housing, Blower.
			Prior to Spec "H".
3	134D519	1	For Pressure Cooled
3	134D609	1	For Vacu-Flo Cooled
			Begin Spec "H"
3A	134D1016	1	For Pressure Cooled
3A	134D1101	1	For Vacu-Flo Cooled (Replaces #134D1017)
4	516-91	2	Pin, Groove - Sheave & Blower Wheel to Flywheel - Vacu-Flo plants only.
5	134D570	1	Scroll, Air - Front - Vacu-Flo plants only.
6			Scroll, Air - Rear - Vacu-Flo plants only.
			Prior to Spec "H"
	134C571	1	Begin Spec "H"
	134D1015	1	Begin Spec "H"
7			Nut, Speed - "U" Type - Scroll to Blower Housing - Vacu-Flo plants only.
			Prior to Spec "H"
	870-119	3	Begin Spec "H"
	870-126	3	Begin Spec "H"
8	809-43	11	Screw, Sheet Metal - #10 x 3/8 - Scroll - Vacu-Flo plants only.
9	870-120	8	Nut, Speed - "J" Type - Scroll - Vacu-Flo plants only.
10	812-150	2	Screw, Round Head - 1/4-20 x 5/8" - Sheave & Blower - Vacu-Flo plants only.
11	192B261	1	Sheave, Rope (Listed in Magneto Group also)
12	134C563	1	Wheel, Blower - Vacu-Flo plants only.

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
13			FIG. 17 - AIR HOUSING & VACU-FLO COOLING GROUP (Cont.)
	160C470	1	Flywheel, Magneto - Vacu-Flo plants only (Listed in Magneto Group also)
	160C672	1	Parts Key Nos. 1 through 7.
	160C486	1	Prior to Spec "H"
14	134K955	1	Begin Spec "H"
			Parts Key Nos. 8 and 9 - Prior to Spec "H"
			Shutter Kit, Air Discharge - Automatic - OPTIONAL ACCESSORY for all Unhoused Vacu-Flo
			Plants (and Housed Vacu-Flo plants Begin W/2-1-59).
15	134A1014	1	Bracket, Blower Housing Mounting - Begin Spec "G"
			SPECIAL PARTS GROUP FOR MODEL 105AK - 1ML/and 105AK-1PL/ with AUTOMATIC IDLE CONTROL
			NOTE: For Parts not listed in this group, refer to Standard Groups and use Parts Key No. 8 for Model 105AK-1MP/ and Parts Key No. 9 for Model 105AK-1PL/.
	150B792	1	Bracket, Solenoid
	150B795	1	Cover, Solenoid
	306P156	1	Solenoid, Idle
	150A784	1	Lever, Idle
	150P73	1	Bearing, Idle Lever
	150A638	1	Joint, Ball, Idle Lever to Solenoid
	145A241	1	Link, Solenoid
	508-91	2	Bushing, Solenoid Plunger
	516-125	1	Pin, Link to Solenoid
	815-231	1	Bolt, Stripper - 1/4-20 - Idle Lever
	150A793	1	Link, Idle Control
	150A115	1	Spring, Idle Control
	150A798	1	Stud, Idle Control
	518-192	3	Clip, Angle - Solenoid Mounting
	308-2	1	Switch, Idle Solenoid
	302B147	1	Transformer

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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SPECIAL PARTS GROUP FOR MODEL 105AK - 1ML/ and 105AK-1PL/ with AUTOMATIC IDLE CONTROL (Cont)

NOTE: For parts not listed in this group, refer to Standard Groups and use Parts Key No. 8 for Model 105AK-1MP/ and Parts Key No. 9 for Model 105AK-1PL/.

307A62	1	Relay, Idle Control.
323-52	1	Socket, Relay - Idle Control.
332A406	1	Block, Terminal - 3 Place.
301C1898	1	Box, Receptacle.
301C1899	1	Cover, Receptacle Box

OPTIONAL GAS FUEL SYSTEM GROUP (Not illustrated)

NOTE: Refer first to this group for gas fuel system parts. For parts not listed in this group, refer to gasoline fuel system group.

148K337	1	Kit, Gas (only) Conversion - Contains Garretson Regulator and associated parts. Carburetor, Gas Fuel. Parts Key Nos. 8, 9 and 10
143B88	1	Prior to Spec "H" - Includes parts marked (†) and (●) - Use #143B160.
143 B160	1	Begin Spec "H" - Includes parts marked (▲) and (●). Parts Key Nos. 1 through 7.
143B88	1	Prior to Serial No. 626862 - Use #141B160.
143B160	1	Begin Serial No. 626862 - Includes parts marked (▲) and (●).
148A269	1	● Valve, Choke. Valve, Needle - Main Adjusting.
148A268	1	† Parts Key Nos. 8, 9 and 10 - Prior to Spec "H".
148A268	1	Parts Key Nos. 1 through 7.
148A413	1	† Prior to Serial No. 626862. ▲ Begin Serial No. 626862 (NOTE: Also used Parts Key Nos. 8, 9 and 10 Begin Spec "H").
148A267	1	Counterweight, Choke Valve Shaft. † Parts Key Nos. 8, 9 and 10 - Prior to Spec "H".

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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OPTIONAL GAS FUEL SYSTEM GROUP (Not illustrated) (Cont.)

NOTE: Refer first to this group for gas fuel system parts. For parts not listed in this group, refer to gasoline fuel system group.

Counterweight, Choke Valve Shaft (Cont.)

Parts Key Nos. 1 through 7.

† Prior to Serial No. 626862.

▲ Begin Serial No. 626862 (NOTE: Also used Parts Key Nos. 8, 9 and 10 Begin Spec "H").

148A287	1	● Screw, Set - Socket Head - #8-32 x 3/16" - Counterweight.
148A412	1	* Regulator, Gas Pressure (Ensign Manufacture).
803-2	1	* Regulator, Gas Pressure (Garretson Manufacture).
148-9	1	Hose, Regulator to Carburetor (Use with Ensign Manufacture Regulator Only).
148C311	1	Hose, Regulator to Carburetor (Use with Garretson Manufacture Regulator Only).
501A25	1	Clamp, Hose (Use with Ensign Manufacture Regulator Only).
503A315	1	Clamp, Hose (Use with Garretson Manufacture Regulator Only).
503-27	1	Vent, Atmospheric (Use with Garretson Manufacture Regulator Only).
503-32	2	Repair Kit, Gas Regulator - (For Ensign Regulator).
148A107	1	Repair Kit, Gas Regulator - (For Garretson Regulator).
148-300	1	
148P390	1	

* - Two types of gas pressure regulators were used. Compare nameplate on regulator for manufacture and order parts accordingly.

OPTIONAL OIL BASE HEATER GROUP (Not illustrated)

333-3	1	Element, Oil Base Heater.
309-29	1	Thermostat.
333A12	1	Box, Thermostat.
333A13	1	Cover, Thermostat Box.
133A3	1	Guard, Thermostat.
333A17	1	Cable, Heater Connection.

PARTS LIST

REF. PART QUANT.
NO. NO. USED

DESCRIPTION

SERVICE KITS & ACCESSORIES

101K257	Gasket Kit, Rear Beacing (Included in #168K63).
113-12	Ring Set, Piston
134K955	Shutter Kit, Air Discharge - OPTIONAL ACCESSORY - VACU-FLO PLANTS ONLY - ALL Unhoused (Housed Begin 2-1-59).
143K80	Gasket Kit, Carburetor.
143K81	Repair Kit, Carburetor.
148K337	Gas Conversion Kit (Accessory).
149K526	Repair Kit, Fuel Pump.
160K540	Point Set, Magneto.
160B478	Point Set, Anti-flicker (For plants W/Parts Key Nos. 1, 2, 3, and 4).
168K63	Gasket Kit, Plant.
192K270	Starter Kit, Rope Recoil (Accessory). Prior to Spec "H".
192K343	Starter Kit, Rope Recoil (Accessory). Begin Spec "H".
403K365	Frame, Carrying (Accessory) for plants W/Parts Key Nos. 1, 3, and 8.
403B455	Frame, Carrying - For Plants with Parts Key No. 9.
403K174	Bracket Kit, Quick Release (Accessory) for use W/Carrying Frame.
410C219	Dolly, 2 Wheel (Accessory) for plants W/Parts Key Nos. 1 through 8.
412B4	Cover, Canvas - W/Grommets & Draw String (Accessory). Overhaul Kit.
522K147	For plants W/Parts Key Nos. 1 and 2.
522K148	For plants W/Parts Key No. 3.
522K149	For plants W/Parts Key No. 4.
522K150	For plants W/Parts Key No. 5.
522K151	For plants W/Parts Key Nos. 6 and 7, Spec A.
522K156	For plants W/Parts Key Nos. 6 and 7, Begin Spec B.
522K152	For plants W/Parts Key Nos. 8 and 9.
	STA-BIL (Gasoline Additive) Prevents gum formation -
524-73	4 Ounce Can
524-74	16 Ounce Can
524-75	32 Ounce Can
525P90	Paint, Touch-up (Pressurized Can) 12 Ounce - Mouse Grey Enamel.

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